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TITLE SUMMARY OF A CONFERENCE OF TEACHERS AND ADMINISTRATORS USING THE INSTRUCTIONAL SYSTEM INDIVIDUALLY PRESCRIBED INSTRUCTION; MARCH 29-31, 1968.

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ABSTRACT

THE CONFERENCE WAS DESIGNED TO GIVE TEACHERS AND ADMINISTRATORS AN OPPORTUNITY TO EXCHANGE IDEAS ABOUT THE INDIVIDUALLY PRESCRIBED INSTRUCTION (IPI) PROGRAM, ASK THEM FOR FEEDBACK CONCERNING RECOMMENDATIONS FOR IMPROVEMENT OF IPI, AND PROVIDE THEM WITH INFORMATION CONCERNING THE FUTURE DEVELOPMENTS OF IPI. FOURTEEN WORKSHOP SESSIONS ON VARIOUS TOPICS ARE SUMMARIZED AND THE RESULTING SUGGESTIONS ARE LISTED. A QUESTIONNAIRE WAS ADMINISTERED TO ALLOW THE PARTICIPANTS TO RATE THEIR PERCEPTION OF IPI AS A METHOD OF INSTRUCTION. THE INFORMATION GATHERED FROM THIS QUESTIONNAIRE IS TABULATED AND SUMMARIZED. THE PARTICIPANTS AT THE CONFERENCE AND THE CHAIRMEN OF THE WORKSHOP SESSIONS ARE LISTED. (JY)

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SUMMARY
of a
CONFERENCE
of
TEACHERS and ADMINISTRATORS
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INSTRUCTIONAL SYSTEM
INDIVIDUALLY PRESCRIBED INSTRUCTION

March 29, 30, 31
1968

Research for Better Schools, Inc.
Philadelphia, Pennsylvania

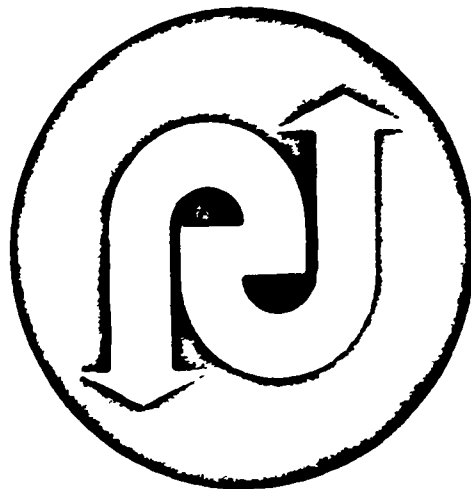
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I. INTRODUCTION

On March 29, 30 and 31, the second annual conference of teachers and administrators currently involved in Individually Prescribed Instruction was held at the Benjamin Franklin Hotel in Philadelphia. The conference was sponsored by Research for Better Schools, Inc. and planned in cooperation with teachers participating in the IPI system. Present at the conference were representatives from the Learning Research and Development Center of the University of Pittsburgh, and Appleton-Century-Crofts of New York.

The objectives of the conference were:

- (1) To give teachers and administrators an opportunity to exchange ideas about the IPI program.
- (2) To ask teachers and administrators for feedback concerning recommendations for improvement of Individually Prescribed Instruction.
- (3) To provide teachers and administrators with information concerning the future developments of IPI.

Nineteen workshops were held for teachers during the conference. Each workshop was co-chaired by a teacher from one of the IPI schools and an RBS representative. In addition, a questionnaire was administered so that participants could indicate their preceptions of IPI as an instructional system. Included here are summaries of each workshop and the specific recommendations that were outlined by the participants and the results of the questionnaire.

II. SESSION SUMMARIES AND SPECIFIC RECOMMENDATIONS

SESSION 1: SEMINARS

There were four sessions dealing with seminars: Math Seminars, primary and intermediate, as well as Reading Seminars, primary and intermediate.

All groups established the importance of seminars. They seemed to provide a necessary addition to the IPI program. The basic problem of the seminar was its lack of flexibility. In order for

seminars to be relevant and consistent with the principles of individualization, a greater degree of flexibility is necessary. Rigid scheduling of seminars—as, for example, once a week—was seen as inappropriate by many of the teachers. Seminars should be scheduled by teachers whenever necessary.

There was some discussion of whether or not the name "seminar" was applicable. Generally, the teachers agreed that large group instruction had been the rule on seminar days. This was seen as only one means of meeting, and not really in keeping with the idea of a seminar. The teachers therefore suggested a wider variety of activities, many of which included greater student participation. These included enrichment activities, practical applications of subject matter, and additional practice of problem areas.

Specific Recommendations

MATH SEMINARS

1. New activities were suggested to enrich the regular subject matter.
 - a. Use of film strips and film loops.
 - b. Development of special units: The Newspaper, etc.
 - c. Use of dice to show computation of facts.
 - d. Use games for practical problems such as telling time.
 - e. Discuss modern math terminology.
2. Reorganization of students and teachers was suggested to provide variety and flexibility of schedule.
 - a. Group by skills with peer tutoring included.
 - b. Encourage lectures by students.
 - c. Let the teachers regroup themselves according to strengths or interests.

- d. Obtain help from outside math consultants to present different areas.

READING SEMINARS

1. Supplementary materials were suggested.
 - a. Ginn Books 1, 2, 3.
 - b. Cedar Rapids Program—compositions and writing.
 - c. Scott, Foresman pre-primer—to use in place of McGraw-Hill if students become bogged down.
 - d. Torrance Creativity Books—ideas for seminar topics.
 - e. Sullivan Readiness Charts—phonics.
2. New activities were also recommended.
 - a. Book reports.
 - b. Dramatizations.
 - c. Poetry writing, reading and creative writing.

SESSION 2: PLANNING SESSIONS

Two workshops concerning planning sessions were held: one for the primary grade teachers and one for the intermediate grade teachers. The teachers shared the particulars about their present planning sessions and many good ideas were exchanged.

Two main problems were discovered through the discussion. The most pressing need in many schools was for more time to plan. The time that has been allotted is too short, and in some cases too infrequent to be useful. The second concern was with the need for structure in planning sessions. Because of a time difficulty and a wide range of material to be covered, the teachers felt that the meetings must have a definite structure, including: an agenda, consistent leadership, written notes of each meeting, and a week-to-week review of decisions previously made.

Both groups specified a number of purposes of planning sessions.

- 1. Support of new faculty members.**
- 2. Discussion of procedural and content difficulties.**
- 3. Reporting of individual student progress and problems.**
- 4. Development of new instructional strategies including re-grouping and the use of other materials.**
- 5. Delegation of responsibilities to floaters.**
- 6. Teacher education in the use of manipulative aids.**

Specific Recommendations

- 1. Gripes should not be brought to planning sessions. One way to handle this is through a suggestion box, which would be reviewed by the administrator and handled either individually or with the group if it is of general concern.**
- 2. Teachers should plan meeting agendas. This could be done by using a bulletin board. The teachers would tack up their ideas for each meeting, and the administrator would then put these together in an agenda.**
- 3. Information seminars or workshops planned by teachers and for teachers would be a helpful learning experience.**
- 4. A designated leader must attend all planning sessions.**
- 5. The purpose of each planning session may be different, but it should be clearly stated.**
- 6. Notes should be taken and distributed to the total staff.**
- 7. An ongoing communication loop between the schools should be established so that ideas could be exchanged on a regular basis.**

SESSION 3:

PRIMARY READING

An overview of the primary reading program was presented by Dr. Jack Fisher. A discussion followed which included the strengths and the weaknesses of the program.

Weaknesses:

1. There is not adequate coverage of alphabet work.
2. No motor coordination skills are developed before teaching the pupil writing and letter discrimination.
3. Children have difficulty in comprehending directions.
4. Too often words are not being attacked to their fullest. The picture clues are being used rather than the words.
5. The retention of reading skills was seriously questioned. There is not enough review to establish a permanent reading base.
6. It is felt that the pupils are reading only enough to be able to fill in the frames of the programmed reading materials and ignoring story comprehension.
7. There are no alternatives structured for the individual who can't seem to function in the program as it now exists.

Strengths:

1. The illustrations found in the materials have good pupil interest.
2. The individualization features and procedures of the program are necessary and worthwhile.
3. Placement tests are important, but it was thought that additional considerations should be given to the number of items missed or omitted.
4. The materials do a good job in generating enthusiasm, developing competition, and providing motivating experiences for children.

Specific Recommendations

1. A truncated effort should be made to cut down on the number of books, frames and sound discs the pupils are required to use.
2. A predominant need for the teacher is to have a prescription format that would permit more flexibility in prescribing the use of other materials and alternative paths.
3. Suggestions need to be developed concerning the value of grouping and regrouping children to provide additional pupil-teacher interaction.
4. The objectives of the seminar should be made more precise to enable pupil growth to take place in group teaching situations.
5. Teacher-made materials and presentations should be put on sound discs to promote additional individualization of difficult skill areas.

SESSION 4: INTERMEDIATE READING

The teachers discussed the transitional and independent reading programs. The discussion centered around correlating reading and the skills program, and alternative ways of bridging the gap between transitional and independent reading.

Each school represented, outlined its independent reading program. Oakleaf and McAnnulty, in Pittsburgh, shared some of the new additions to the program which they are beginning to use; this was particularly profitable to the group.

Specific Recommendations

1. Use other third grade readers to bridge the gap between transitional and independent.
2. Use the first book in transitional (*I Can't, Said The Ant*), and then go into the Scott, Foresman Reader.

3. Disseminate new techniques developed at the Learning Research and Development Center.
4. Provide structured guidance from RBS in the area of reading.
5. Develop materials which closely correlate skills and reading materials.

SESSION 5: CLASSROOM MANAGEMENT

Two groups were established, primary and intermediate. The objective of the session was to outline strategies to increase the effectiveness and efficiency of the program.

Specific Recommendations, Primary

1. Skill booklets could be scored as they are at Oakleaf. The aides do not mark the problems that are incorrect. They simply mark the score and the child must find the wrong answers and correct them.
2. An extra file of pages not used in the skill booklet could be made. The children would be assigned these pages to be used as "seat work," or work to do while waiting for a test to be scored.
3. In Trenton, after the aide marks the work pages, the child uses a red pencil to make his corrections. This enables the teacher to see where the child needs help.
4. A standing assignment correlated with skill pages requires the child to practice and review necessary material.
5. A five- to ten-minute seminar at the beginning of math class to review fundamentals was thought to be necessary.
6. Math games and manipulative devices should be available to the children for a change of pace and for additional motivation. These devices should be coded by unit and level.
7. In the reading program, teachers should hear the oral tests being read so that they can locate pupil problems.

8. Opportunities should be provided for more floater and classroom teacher interaction for planning purposes. The principal, floater and classroom teachers need to do more together to stay aware of problems and plot strategies for instruction.
9. A clearer definition of aide function and possible use in instruction should be developed. The voluntary aide should be eliminated. It has led to some unhealthy situations.

Specific Recommendations, Intermediate

1. Floating teacher:

- a. She should become involved with what the teacher wants rather than what the floater prefers.
- b. The floater's time should be scheduled to coincide with planning sessions enabling an active involvement.
- c. It has become necessary for the floater to be intrinsic to the IPI program, rather than to create an autonomy.
- d. If the teacher requires additional planning and prescription writing time, the floater can assume some of her classroom teaching duties.

2. Pupil participation:

- a. The pupils need to become more involved with writing prescriptions and making instructional decisions. This could be done with teacher assistance, or independently. It would be excellent for motivational purposes.
 - b. Pupil-teacher interaction is considered important and necessary for having the pupil eventually on his own.
3. It was generally agreed that the best prescription was one in which the least amount of work and days were required to accomplish a learning task.

4. Training program:

- a. Most of the teachers thought some "essentials" could be covered by mail, but the actual involvement and learning by doing were the most critical and important issues.**
- b. As part of any training package, an aide orientation should be included, and the aide function should be defined.**
- c. More could be done if the instructional techniques were defined and some means of implementation could be suggested.**
- d. The mechanics and procedures of IPI should only be used as a springboard to becoming more refined in the process of individualization.**

SESSION 6: MATH READINESS

This group discussed factors affecting readiness, levels of readiness and concepts to be developed before beginning Level A. The factors affecting readiness included the experiential background, the emotional and educational preparation found in kindergarten, the ability to follow directions, and the actual mental age of the child. The concepts to be developed in Level Pre-A are patterns, seriation, logical consequences, and matching one to one. The discussion also included the problem of retention and its relationship to the principles of IPI. Social immaturity seemed to be the deciding factor in retaining students.

Specific Recommendations

- 1. There is a need for a variety of means to convey concepts to the students.**
 - a. Film loops and strips.**
 - b. Recordings and worksheets.**
 - c. Manipulative devices.**
 - d. Game and kinesthetic activities.**

2. Instruments should be developed to measure levels of readiness. Level B Placement Tests do not do this.

SESSION 7: READING READINESS

This session gave the teachers an opportunity to express some of the frustrations they are facing in preparing students for McGraw-Hill. There was a general feeling that further developmental work is needed in reading and that teachers in all schools are facing similar problems. It was established that there are elements common to any reading program and that they can be identified and sequentially developed.

Specific Recommendations

1. In order to aid the teacher with reading readiness, the developers of the program should discuss and identify in behavioral terms, the objectives of a reading readiness program.
2. A sophisticated readiness program should be developed for the older child.
3. The beginning phases of the reading program should be rebuilt.

SESSION 8: TEACHER EVALUATION

Two sets of criteria were developed: those that principals should use in evaluation of an IPI teacher; and those that teachers should use in self-evaluation. These two areas do overlap. However, the teachers were very clear that there should be two types of evaluation. One evaluation should be used for the purpose of tenure. The other evaluation must be totally in terms of constructive criticism and be a continuous process with the goal of improving teachers' work.

Specific Recommendations

1. Administrators should not evaluate a teacher on IPI work in terms of a report to the superintendent.
2. Evaluation should be on-going. There are certain factors to be recognized by the principal.

- a. He should be aware of teacher interaction with the child. Possibly, teachers could be taped, and then meet with the principal and other teachers to listen, comment and make recommendations.
 - b. Classroom management can be noted through general observation of the class so that the principal can determine the general attitude of the children and the ability of the teacher to get around to all the students.
 - c. The principal needs to be a part of all planning sessions.
 - d. The principal should be able to analyze the prescriptions.
 - e. Basically, the principal should work in all IPI classes so that he is aware of the special needs of an IPI teachers and the problems that do arise.
3. The idea of a check-list which the teachers can use for self-evaluation and the principals can use as part of the ongoing evaluation was suggested. Items which were recommended for inclusion were that teachers should:
- a. Regroup when necessary.
 - b. Provide the children with manipulative devices and encourage their use.
 - c. Vary instructional techniques.
 - d. Vary the number of pages prescribed.
 - e. Vary in their interactions with children.
 - f. Divide their time among the children who need them.
 - g. Encourage children to interact among themselves to solve problems.
 - h. Follow IPI procedures in use of tests.

- i. Encourage self-scoring and self-prescribing (depending on grade level and the particular student).
- j. Interact in planning sessions held with the principal and other teachers on a regular basis.

SESSION 9: PRESCRIPTION WRITING

The main objective was to establish ways of increasing effectiveness and efficiency in prescription writing. The concerns of the participants were in terms of handling down time, altering the prescription sheet to make it more useful for teachers, and introducing greater variety in prescription writing. Student involvement in the process of prescription writing was emphasized by both groups that discussed this issue.

Specific Recommendations

1. The extent of student participation should be increased. Examples of achieving this increase were suggested.
 - a. Discuss the pretest with the student.
 - b. Consult the child on the number of worksheets to be done.
 - c. Let the child decide when he is ready for the CET or the post-test.
 - d. Have the student maintain a flow chart for use in seeking help from other students.
 - e. Let one child prescribe for another, if they are both in the same unit.
 - f. Teach the child to look at his pretest and to pull the first skill booklet he needs.
2. Suggestions were made to promote more efficient and effective prescription writing. On the prescription sheet:
 - a. There should be a front page with the scores and a second page with only lines.

- b. There should be space for the teacher to make notes about instructional techniques.
- c. Children can be responsible for ordering prescription sheets.
- d. Children can be responsible for recording instructional code techniques.
- e. Aides can be used to stuff the folder for the child's first skill after a pretest.

SESSION 10: REPORTING PROGRESS

This session included a thorough analysis and discussion of the reporting methods used in each of the IPI schools.

Specific Recommendations

1. RBS should develop and insist upon a standard reporting system that is compatible with the objectives of IPI.
2. RBS should develop a procedure for the orientation of parents and visitors concerning the reporting system.
3. Progress reports should include:
 - a. Progress chart.
 - b. Number of skills in each unit.
 - c. Check-list of work habits.
 - d. Reading report with more information than skills progress.
 - e. Conferences before the initial report, and afterward upon request.

SESSION 11: SPECIAL LEARNING PROBLEMS

This session covered a wide range of material divisible into three categories of techniques aimed at:

- 1) Fostering independence.

- 2) Dealing with speech, hearing and foreign language problems.
- 3) Working with the slow learner.

These topics covered so much material that it was very difficult to isolate concrete answers to the problems. There was a recognition that basic difficulties exist in all schools and that there must be experimentation with different strategies.

Specific Recommendations

1. Teachers should check the work of extremely careless students before it is scored by aides.
2. Incorporate new materials to help students master difficult units.
3. Special IPI programs could be developed for extremely slow students and those suffering from emotional problems.
4. Those students who cannot master the current unit should return to the prior unit to determine mastery of all past skills. (For instance, a student working in E-Num would be taken back to D-Num).
5. Exercise greater use of peer tutors for slow students.
6. It is a good idea to have the slow child work in a unit of his own choice as long as he does not stray far from the continuum.

SESSION 12: CREATIVE ADAPTATIONS

The teachers shared their ideas for "wiggling" the IPI system in order to increase individualization of instruction. In some schools the teachers have already begun to experiment with their ideas.

Specific Recommendations

1. Materials:
 - a. Develop new math materials and increase the variety of materials and modes of instruction.

- b. Reorganize STS booklets so that the first three pages provide a standard introductory prescription to the skill.

2. Prescription Writing:

- a. Teach students to prescribe for themselves and others.
- b. Redesign transfile for student use.

3. IPI Roles:

- a. Students should operate more independently in prescription writing.
- b. Aides should make minor decisions (e.g., directing student to further help, prescribing first skill) and perform para-professional duties (e.g., hearing oral tests, conducting drill exercises, overseeing small groups).

4. Evaluation:

- a. In reading, permit student to read skill objective, review the CET and then take the CET.
- b. Develop a variety of diagnostic tests for learning characteristics, modes of learning, etc.

5. Time:

- a. Eliminate seminars.
- b. Introduce flexible scheduling.

6. Classroom Management:

- a. Introduce selection of peer-tutor.
- b. Develop procedures for teacher-help of student.

SESSION 13: LEARNING CHARACTERISTICS

Two sessions were held concerning learning characteristics: one for primary level teachers and one for intermediate level

teachers. An attempt was made to specify exactly what learning characteristics are. In general, they include: motivation, style, physical-emotional state, stimulus-and-response patterns, and potential.

When considering learning characteristics most evident in the IPI setting, the teachers included the degree of independence as demonstrated by the attention span and obvious self-discipline. They also discussed the degree of responsibility assumed as indicated when the student obtains his own materials, follows directions, corrects his own worksheets, and begins to prescribe for himself.

The teachers felt that IPI facilitates the teachers' recognition of individual differences, but at this point there are not enough ways designed in the system to handle these differences.

Specific Recommendations

1. In prescribing, teachers should look at the behavior to be learned first, and then write the prescription. The STS should not be the only source for writing prescriptions.
2. Additional material^s should be correlated with the IPI objectives.
3. The study of learning characteristics should be included in the IPI teacher training.
4. Development of case studies is a useful way of studying learning characteristics.
5. Parent conferences give the teacher important information about the students.
6. The prescription sheet should contain more information about each child.
7. Additional workshops should be held to consider the issues raised.

SESSION 14:

PUBLIC RELATIONS

The group discussed a variety of issues. The questions of what role teachers should play in public relations was considered. No specific conclusions were reached, but the teachers were definitely interested in this area. It was felt that more effort should be directed toward creating an interest in IPI schools, and that the IPI program would be a good way to involve the community including business and industry. The teachers also looked at the features of IPI that are particularly newsworthy.

Specific Recommendations

1. Greater communication between all schools involved in IPI should be developed. RBS should act as a clearinghouse for this information.
2. The home-office should not prepare the publicity for local papers.
3. An investigation should be made of ways to encourage local industries to finance IPI and other local projects.
4. Colleges should be exposed to IPI in order to familiarize new professionals with the program.
5. Presentation of factual data is important to the community.
6. Visitors' comments should be compiled and shared with the public.

III. EVALUATION OF WORKSHOP SESSIONS

Teachers were asked to rate each workshop session. A five-point scale was used, ranging from Most Helpful to Not Helpful. Below are the percentages in each category.

IV.

SESSION	MOST HELPFUL	SOMEWHAT HELPFUL	SO-SO	LITTLE HELPFUL	NOT HELPFUL
1. SEMINARS, MATH & READING	64	28	4	2	2
2. PLANNING SESSIONS	63	29	4	4	
3. READING, PRIMARY	63	37			
4. READING, INTERMEDIATE	75	25			
5. CLASSROOM MANAGEMENT	43	33	20		4
6. MATH READINESS	86	14			
7. READING READINESS	72	14			14
8. TEACHER EVALUATION	66	11	23		
9. PRESCRIPTION WRITING	85	5	5	5	
10. REPORTING PROGRESS	76	16		8	
11. SPECIAL LEARNING PROBLEMS	33	42	20	5	
12. CREATIVE ADAPTATIONS	67	13	20		
13. LEARNING CHARACTERISTICS	22	25	39	14	
14. PUBLIC RELATIONS	38	38	12		12

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TEACHER INFORMATION CONCERNING IPI AS AN INSTRUCTIONAL SYSTEM

The 147 participants indicated their perceptions of IPI as an instructional system in a questionnaire designed to help the IPI Instruction team. They rated certain aspects of the system (e.g., pupils' motivation, materials, planning sessions, etc.) on a scale from Excellent to Poor. The positive responses outweighed the negative by a ratio of 2 to 1. In addition, the teachers were asked to make specific comments. These remarks were positive and negative statements, as well as recommendations. The responses to comments were grouped in four categories: pupil-oriented, teacher-oriented, system-oriented, and general information.

PUPIL-ORIENTED			
QUESTION	PERCENT RESPONSES		
	EXCELLENT OR QUITE GOOD	ADEQUATE	NOT TOO GOOD OR POOR
IPI MATHEMATICS FOR THE ABOVE AVERAGE PUPILS IN YOUR CLASS IS ¹	88	8	2
IPI MATHEMATICS FOR THE AVERAGE PUPILS IN YOUR CLASS IS ²	80	14	1
IPI MATHEMATICS FOR THE BELOW AVERAGE PUPILS IN YOUR CLASS IS ³	38	31	25
¹ - 2% NO RESPONSES ² - 5% NO RESPONSES ³ - 6% NO RESPONSES			

Many teachers recommend the development of alternative approaches for all three types of pupils. The greatest need seems to be for the slow student who is a non-reader and therefore must wait for an aide or teacher to assist him in understanding the directions.

Contrary to the ratings, the comments show that below-average (except for the non-reader) and above-average pupils seem to benefit most from the program because their interest level is maintained. Frustration at waiting for the slow student or being left behind by the quick student is alleviated.

PUPIL-ORIENTED

QUESTION	PERCENT RESPONSES		
	EXCELLENT OR QUITE GOOD	ADEQUATE	NOT TOO GOOD OR POOR
HOW DO YOU RATE THE FOLLOWING ASPECTS OF IPI MATH?			
CLASSROOM ATMOSPHERE FOR PUPILS ¹	80	15	3
LEVEL OF CHILDREN'S MOTIVATION ²	78	15	2
DISCIPLINE ³	76	18	3

1 - 2% NO RESPONSES

2 - 5% NO RESPONSE

3 - 3% NO RESPONSES

Teachers' comments concerning the pupil reaction to the program are very favorable. One of the most repeated themes is that the children enjoy the freedom of movement and lack of pressure and enjoy working at their own pace. Independence, responsibility and involvement in their work are greatly increased; in fact, the children, are very difficult to distract. The above- and below-average pupils are not bored or frustrated and, thus, discipline problems are reduced.

The individual nature of the program is ideal for genuine competition, as even the withdrawn child is able to compete with his more aggressive peers. At the same time, no pupil feels like a failure, which certainly helps the attitude toward school. The focus is on learning and self-improvement.

A few teachers do feel that the interaction between pupils is restricted and causes the children to miss the stimulation of their peers. Recommendations to eliminate this problem include peer-tutoring and more extensive use of seminars.

TEACHER-ORIENTED

QUESTION	PERCENT RESPONSES		
	EXCELLENT OR QUITE GOOD	ADEQUATE	NOT TOO GOOD OR POOR
HOW DO YOU RATE THE TRAINING AND PREPARATION OF TEACHERS? ¹	42	20	29
1 - 2% NO RESPONSES			

The teachers made a number of very specific recommendations. First, due to the high degree of teacher transiency, a system needs to be designed to train new teachers who enter a school where IPI has already been instituted. The suggestions include the distribution of a manual to all teachers containing procedures, materials, and suggestions for conducting a good IPI class; a "buddy" system; and the advice that IPI teachers should have had previous experience in conventional classrooms. There seems to be a feeling that understanding and efficiency in IPI come only with experience in the program; thus, observing and/or working in IPI classes should coincide with the lectures and seminars in IPI theory.

TEACHER-ORIENTED

QUESTION	PERCENT RESPONSES		
	EXCELLENT OR QUITE GOOD	ADEQUATE	NOT TOO GOOD OR POOR
HOW DO YOU RATE THE FOLLOWING ASPECTS OF IPI MATH?			
TEACHER'S INSTRUCTIONAL ROLE ¹	73	19	7
CLASSROOM ATMOSPHERE FOR TEACHERS ²	74	18	5
1 - 1% NO RESPONSES		2 - 3% NO RESPONSES	

The majority of IPI teachers feel they are doing a better job because the program provides the direction and materials needed to account for individual differences. Almost all find the classroom atmosphere productive and happy. The most frequently used expressions are: stimulating, free and relaxed.

Several teachers comment that the high degree of direction has begun to make them feel mechanical and impersonal. Many more feel relieved that busy work is now handled by the aide so that guidance and instruction can form the basis of the teacher role.

SYSTEM-ORIENTED

QUESTION	PERCENT RESPONSES		
	EXCELLENT OR QUITE GOOD	ADEQUATE	NOT TOO GOOD OR POOR
THE INSTRUCTIONAL MATERIALS ARE ¹	48	32	16

1 - 4% NO RESPONSES

Teachers feel that the ungraded continuum provides direction even for the advanced students who previously had only makeshift materials. It also insures that each child will eventually master the same essential skills. However, in order to be truly individualized, many teachers recommend that a variety of approaches be available to present the same materials.

An abundance of suggestions are made to improve the condition of the actual worksheets: (1) Directions should be simplified for faster student comprehension. (2) Non-readers should have more work with tapes so that valuable teacher time is not wasted reading directions. (3) The lower levels should be revised to include as much simplified vocabulary as possible. To increase student interest a variety of typefaces, color and page layouts should be used.

The content of the materials is also a focal point of the questionnaire responses. The gap between Levels A and B should be bridged with some readiness material. More concentration is requested on certain concepts, such as: inversion, percentage, numerator and kilometer. The art of abstract problem solving is also not well developed. Many teachers feel that the math content, in general, should be updated.

SYSTEM-ORIENTED

QUESTION	PERCENT RESPONSES		
	EXCELLENT OR QUITE GOOD	ADEQUATE	NOT TOO GOOD OR POOR
THE TESTING MATERIALS ARE ¹	48	31	16
1 - 5% NO RESPONSES			

A number of teachers state that more emphasis should be placed upon verbal testing for poor or non-readers. Other recommendations include the use of a simpler vocabulary at the lower levels, manipulative devices according to teacher judgment, higher mastery level on placement tests, greater number of items on the second part of the CETS, fewer changes of direction on test pages, and a third form of CETS and post-tests.

In conjunction with the expressed need for alternate approaches to accommodate varying rates of learning, teachers recommend the development of diagnostic tests capable of determining exactly how a child learns.

SYSTEM-ORIENTED

QUESTION	PERCENT RESPONSES		
	EXCELLENT OR QUITE GOOD	ADEQUATE	NOT TOO GOOD OR POOR
HOW DO YOU RATE PLANNING SESSIONS IN IPI MATHEMATICS? ¹	33	27	30
2 - 10% NO RESPONSES			

Most teachers feel that planning sessions, when properly structured and conducted by the administrator of the school, could be most helpful in fostering professional relationships. Planning sessions can provide the opportunity to exchange ideas, make constructive criticisms, plan for individual children and conduct group therapy. Times allotted for the sessions vary widely. Some schools hold

weekly meetings; other schools hold them irregularly; and some have no sessions at all. When planning sessions are not properly structured, teachers regard them as a bore and feel that little is accomplished.

SYSTEM-ORIENTED

QUESTION	PERCENT RESPONSES		
	YES	UNCERTAIN	NO
IF YOU WERE GIVEN THE CHOICE, WOULD YOU HAVE SEMINARS NEXT YEAR? ¹	71*	14	10
¹ - 5% NO RESPONSES			

Although seminars do provide variety in the curriculum, teachers and students both dislike them. Students complain that they are boring; teachers say they are a waste of time. Teachers credit this attitude to a lack of understanding of the possibilities and requirements of the seminar. Suggestions for improvement include grouping children by level and skill, varying the group activities, and planning with the children. It was also mentioned that RBS and LRDC should define more explicitly what could be done in a seminar to retain the interest of students and teachers alike.

*This is the only question for which the percentage of favorable responses does not match the comments made. This might be accountable by the large number of teachers attending one of the sessions on seminars in which new ideas and topics were discussed.

SYSTEM-ORIENTED

QUESTION	PERCENT RESPONSES			
	ABOVE AND BEYOND THE CALL OF DUTY	MORE THAN PREVIOUS DEMANDS	EQUAL TO PREVIOUS DEMANDS	LESS THAN PREVIOUS DEMANDS
THE DEMANDS ON AN IPI TEACHER ARE ¹	8	5	16	5

1 - 12% NO RESPONSES

The teachers feel that certain demands must be met in order for IPI to be effective. These needs, which must be achieved as prerequisites to actual prescription writing, include an excellent knowledge of the IPI instructional materials, constant awareness of each pupil's progress, and an analysis of the student's needs. In order to accomplish these objectives, time during the school day and support must be arranged so that prescriptions to be written do not accumulate and non-IPI subjects suffer.

The teachers feel that they are not accorded enough recognition, attention and interest. The administration has no sympathy for their problems. As a consequence, the teachers do not obtain the concern and enthusiasm necessary to boost them over the rough spots.

A few teachers state that teaching in an IPI school should be on a voluntary basis, and that they should be free in practice as well as in theory to transfer after one year if they became unhappy or dissatisfied. Finally, in order to ease some of the tensions between teachers and administrators, a definite system of teacher evaluation should be developed which would allow some constructive criticism for self-improvement, as well as a separate criticism for purposes of tenure.

SYSTEM-ORIENTED

QUESTION	PERCENT RESPONSES		
	EXCELLENT OR QUITE GOOD	ADEQUATE	NOT TOO GOOD OR POOR
HOW DO YOU RATE THE AIDE'S ROLE IN IPI? ¹	68	11	11
1 . 3% NO RESPONSES			

Many teachers have problems with their aides. These range from the aides assuming too much responsibility to acting lazy and assuming none at all. In order to work with the aides without friction, teachers suggest that they have at least a high school diploma, enjoy children, be trained in clerical work, and be specifically oriented to the IPI program.

Better qualified aides would also help solve the problem of insufficient time. The more paper work completed by the aide, the more time available to the teacher for individual consultations. Better trained aides capable of quickly scoring the worksheets reduce the amount of waiting time, thereby relieving the frustration of some children. Noise level would be decreased and attitudes would be more positive.

GENERAL INFORMATION

QUESTION	PERCENT RESPONSES		
	POSITIVE	NEGATIVE	NO RESPONSES
WHEN IPI MATHEMATICS WAS FIRST INTRODUCED INTO MY SCHOOL, I FELT	50	37	13
NOW THAT I HAVE HAD SOME EXPERIENCE WITH IPI MATH, I FEEL	87	9	4

The initiation of IPI into the schools is met by interest and excitement coupled with apprehension and questioning, and the feeling of satisfaction and stimulation becomes prevalent. As the teachers become more involved with the system, the frustrations decrease. The respondents feel optimistic about the future of IPI and state the need for the system to continue and expand.

QUESTION	PERCENT RESPONSES		
	POSITIVE	NEGATIVE	NO RESPONSES
I FIND TEACHING IN IPI CLASSES TO BE	92	5	3

As an overall view of IPI, teachers feel enthusiastic about the strengths, constructively critical about the defects, and hopeful about the myriad future possibilities for individualizing instruction.

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